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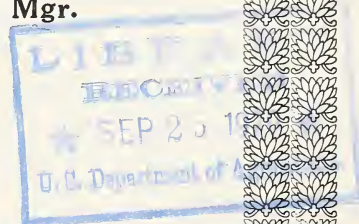
U. S. DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY
OFFICE OF INVESTIGATION

CATALOG

OF THE

Van Dusen Nurseries

C. C. McKAY, Mgr.



1919

GENEVA
NEW YORK



Price Each		Below we indicate the color, size, quality, date when fruit becomes edible in Western New York and the number of weeks these varieties will keep in cool dry cellar storage at Geneva after first becoming ready to eat. Pick late Fall and Winter apples while hard and allow to mellow up in storage.						
Standard	Dwarf	APPLES	Color	Size	Q'ty	Matures	Wks	Remarks
—	75c	Autumn Strawberry	Light Red	Medium	Very Good	Sept. 10-30	9	One of best dessert apples, crisp, juicy, tender. Yellow striped with shades of red.
—	60c	Bailey Sweet	Bright Red	Large	Very Good	Oct. 5-15	4	Very beautiful apple. Good quality, decidedly sweet, juicy, agreeable flavor.
40c	60c	Baldwin	Bright Red	Large	Very Good	Dec. 1-15	14	Favorite market variety, juicy, well adapted for market, dessert or cooking.
40c	60c	Ben Davis	Red Striped	Large	Good	Dec. 1-10	15	Most important variety in territory between 32° and 42° parallels.
—	60c	Bismarck	Red	Large	Good	Oct. 20-30	9	Bears very young, hardy, very productive, an excellent cooking variety.
—	60c	Black Ben Davis	Dark Red	Medium	Good	Dec. 1-10	12	More brilliant color than Ben Davis, decidedly attractive.
—	75c	Chenango	Light Red	Medium	Very Good	Sept. 1-10	3	An excellent dessert fruit, also good for cooking; beautifully striped.
—	60c	Constantine	Bright Red	Large	Very Good	Sept. 20-30	5	Flesh rather coarse, but juicy, suitable for culinary purposes and market.
—	75c	Deacon Jones	Striped Red	Large	Very Good	Dec. 1-12	12	Fruit showy, bears young, very productive, excellent, mainly for cooking.
—	\$1	Delicious	Dark Red	Large	Very Good	Nov. 15-25	10	One of the handsomest, flavor fine, good for all purposes, widely successful.
—	60c	Early Harvest	Yellow	Large	Best	Aug. 1-10	1	One of the earliest and a fine variety for the home garden.
—	60c	Early Ripe	Yellow	Medium	Good	Aug.		Crisp, tender and juicy. A good early culinary apple.
40c	60c	Excelsior	Red	Large	Good	Sept. 1-10	2	Very attractive and large for a crab apple, excellent to eat fresh or to cook.
—	60c	Early Strawberry	Dark Red	Small	Very Good	Aug. 1-10	3	Very attractive and very desirable for both dessert and culinary use.
—	60c	Fall Pippin	Yellow	Large	Very Good	Oct. 5-15	7	Flesh tender and rich, excellent for dessert but especially for cooking.
40c	60c	Fameuse	Bright Red	Medium	Best	Oct. 5-15	8	One of the most beautiful and excellent dessert apples of its season. Not for cooking.
—	60c	Golden Sweet	Clear Yellow	Medium	Ve. Good	Aug. 10-20	2	Valuable, principally for home use, rich, sweet, very good in flavor.
40c	60c	Gravenstein	Red	Large	Very Good	Aug. 20-30	6	Attractive appearance, high quality, almost unexcelled for its season for cooking.
—	60c	Hendrick Sweet	Red	Medium	Very Good	Nov. 5-15	6	Juicy, distinctly sweet, high quality, excellent for dessert, and baking.
—	60c	Hubbardston	Mottled Red	Large	Very Good	Nov. 1-10	11	Bears early, very productive, mild acidity and sweetness mingle in pleasant flavor.
—	60c	Jonathan	Bright Red	Medium	Best	Nov. 15-25	14	Brilliantly colored, highly flavored, crisp, juicy and tender.
40c	60c	King	Bright Red	Large	Very Good	Nov. 15-25	9	Attractively colored, high quality for home use, adapted to fancy market.
—	75c	King David	Dark Red	Medium	Very Good	Nov. 5-15	12	Very richly colored, nearly as good quality as Jonathan, early and prolific bearer.
—	75c	Lady	Red	Very Small	Best	Dec. 5-15	13	A strikingly beautiful apple especially suitable for decorative use or dessert.
—	60c	Lady Sweet	Striped Red	Large	Very Good	Nov. 15-25	7	One of the best sweets for commercial planting, as well as for home use.
40c	60c	McIntosh	Bright Red	Large	Very Good	Oct. 15-25	9	Very handsome, flesh tender, very juicy, delicious, one of the very best.
—	75c	Mother	Bright Red	Medium	Best	Nov. 15-25	8	Rich, tender, juicy, flesh of best dessert quality. Home use only.
40c	60c	Northern Spy	Bright Red	Large	Best	Dec. 5-15	14	Ranks with the very best winter apple of N. Y. Most excellent for all uses.
40c	60c	Oldenburg (Duchess)	Striped Red	Medium	Good	Aug. 1-10	2	An extremely hardy Russian apple, with excellent culinary purposes.
50c	75c	Opalescent	Deep Red	Large	Very Good	Oct. 15-25	9	Attractive in appearance, size, shape and color; moderately juicy, well flavored.
40c	60c	Pound Sweet	Yellow	Very Large	Good	Nov. 5-15	5	Of peculiar flavor, esteemed one of the best sweet apples of its season for cooking use.
40c	60c	Red Astrachan	Striped Red	Medium	Very Good	Aug. 10-30	3	A very beautiful early Summer apple, for culinary use first, for eating when ripened.
—	75c	Red Canada	Deep Red	Medium	Very Good	Nov. 1-10	9	In its season desirable for dessert use, good size, attractive, one of high quality.

Use of Dwarf Fruit Trees for Home Plantations

I no longer believe standard fruit trees deserve a place in the average home garden. We Americans could have learned years ago from England, France, Germany, Holland, Belgium and Italy, that the most delightful and most profitable of fruit plantings for home use is to be secured by using dwarf fruit trees. Whether the dwarf orchard has two trees or twenty trees, it is not merely a toy. It actually pays; and the best of it is, that these little trees occupy so much less room, require little work and commence bearing much quicker than do the standard size fruit trees.

Dwarf fruit trees are distinctly for the amateur and the home plantation. They enable you to have varieties which can not be found commercially, and to secure an assortment which will give fruit in succession over an extended season. You can have your own apples from July to January, or an almost continuous succession of peaches for ten or twelve weeks. Our tabulated ripening dates enable you to select fruit for just the months you prefer.

Something About Our Dwarf Apple Trees

Our main list of dwarf apples is budded on doucin roots to produce the dwarf style of tree. Even under conditions of neglect these trees will rarely grow more than twenty feet high. By a small amount of wise annual pruning they may easily be grown to ten or twelve feet high when mature. We have a small list of apple varieties budded on paradise roots. These trees will rarely grow more than ten or twelve feet high. By judicious pruning however, they can be grown to six or eight feet high when mature.

The trees on doucin roots may be planted from ten or twelve feet to twenty feet apart, depending on the height it is intended to grow them. When on paradise roots they may be planted eight or ten feet apart. We get some reports from customers of trees which fruit the first or second year after planting. Most any of them may be expected to begin bearing at least the third or fourth year. The difference is that some varieties naturally bear younger than others.

How to Care for Trees and Plants Received from the Nursery

Directions for the proper planting of trees, plants, etc., of course include the proper care after receiving them till you have them in the ground. The one great thing to observe is to **PROTECT THEM FROM THE WIND**. It is well to shield them from the direct sun, also well to keep them moist, **but you had better leave them out in the sun perfectly dry three hours, than in the wind one hour**. It's so easy, however, to protect from both sun and wind and at the same time keep them moist, by simply throwing a wet blanket or bags over them, that it seems unnecessary to mention this way. If they must be kept any time before planting or heeling in, place where they will be cool without freezing—a cellar is the best place. But **ALWAYS KEEP A WET COVERING OF SOME KIND OVER THEM**.

If the stock reaches you earlier than you desire to plant it, if in a bale, wet it and put it in a cool cellar till ready to plant; if in a box, put the box in a cool place away from frost, lift the lid, wet it thoroughly, replace the lid and cover the whole box with blankets, straw or anything to protect it; if it should be just a bundle of trees, unprotected, put them in a cellar, covering with wet blankets or old carpeting; wrap

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A Dwarf in Somebody's Yard

Price Each		Trees listed 30c ea. are \$3.00 per doz. Trees listed 60c ea. are \$6.00 per doz. Trees listed 40c ea. are \$4.00 per doz. Trees listed 75c ea. are 7.50 per doz. Trees listed 50c ea. are 5.00 per doz.						
Standard	Dwarf	APPLES	Color	Size	Q'ty	Fruit Matures	Wk	Remarks
40c	60c	R. I. Greening	Grass Green	Large	Very Good	Nov. 20-30	12	One of the best cooking apples, also very good in quality for dessert use.
—	75c	Ribston	Dull Red	Large	Very Good	Oct. 15-25	7	Esteemed for its rich flavor and fine quality, desirable for cooking or dessert use.
40c	60c	Rome Beauty	Mottled Red	Large	Very Good	Dec. 1-10	12	Handsome, one of the best keepers, desirable for market and home use.
—	\$1	Scarlet Beauty	Dark Red	Very Large	Good	Oct. 1-15	4	A great big red apple which is good. Remarkable for its size and unusually deep color.
—	75c	Senator	Deep Red	Large		Dec. 20-30	15	An attractive dark red apple, originally called "Oliver."
40c	60c	Spitzenburg	Bright Red	Large	Best	Nov. 15-25	13	A choice apple for dessert or culinary use, unexcelled in flavor and quality.
40c	60c	Stayman Winesap	Red Striped	Medium	Very Good	Dec. 15-25	13	Very juicy and good quality for either home use or market.
—	75c	Stearns	Striped Red	Large	Very Good	Oct. 5-15	4	I consider this truly a remarkable combination of size, color and quality. (C. C. M.)
—	75c	Stump	Bright Red	Medium	Good	Aug. 25 to Sept. 10	8	A very beautiful apple, esteemed chiefly for dessert use.
—	60c	Sweet Eough	Pale Yellow	Large	Very Good	Aug. 5-25	3	One of the finest summer apples, a great favorite in N. Y. for the home orchard.
40c	60c	Tolman Sweet	Pale Yellow	Medium	Very Good	Nov. 5-15	11	A hardy old New England sort, decidedly sweet, particularly good for baking and pickling.
50c	75c	Wagener	Bright Red	Large	Best	Nov. 15-25	8	An apple of superior excellence, beautiful, bright red, high flavor, fine quality.
40c	60c	Wealthy	Bright Red	Medium	Very Good	Sept. 10-20	5	Valuable for its great hardness, very juicy, good for dessert and cooking.
—	75c	Williams	Dark Red	Medium Large	Very Good	Aug. 15-25	4	A very beautiful bright red apple of mild agreeable flavor, used for dessert.
50c	75c	Winter Banana	Yellow Blushed	Medium Large	Very Good	Nov. 15-25	9	Attractive, of good dessert quality, too mild in flavor to excel in culinary use.
—	60c	Wolf River	Red Striped	Very Large	Good	Sept. 5-15	5	Very hardy, fruit highly colored and attractive, best as a cooking sort.
—	60c	Yellow Newton	Yellow Blushed	Medium	Very Good	Jan. 20-30	10	Also known as Albemarle, of highest quality for dessert and excellent for cooking.
40c	60c	Yellow Transparent	Yellow	Medium	Very Good	July 10-30	2	One of the best extra early apples, acceptable for dessert, excellent for cooking.



Apples on Paradise Roots

PRICES

\$1.00 each, \$10.00 per doz.

Paradise roots give us the dwarfest of dwarf trees. These become beautiful shapely little trees which tend to bear fruit prolifically. Even if neglected they can not become over grown. I believe these are the **ideal dwarf apple trees**. They are so popular I am unable to keep up with the demand, and have had to cross some varieties off my list this season.

Early Varieties

Early Harvest
Early Strawberry
✓ Golden Sweet
Red Astrachan
Sweet Bough
Yellow Transparent

Fall and Early Winter Varieties

Bismarck
Chenango
Constantine
Excelsior Crab
Gravenstein
McIntosh
Scarlet Beauty
Stearns
Stump
Twenty Ounce
Wealthy

Winter Varieties

✓ Delicious
Hendrick Sweet

How to Care for Trees and Plants (Continued)

well from the air and they will remain in good condition for a long time. In all these cases, however, it is of course correct to unpack, and "heel in" thoroughly till ready to plant. But **REMEMBER ALL THE TIME** that it is impossible to get trees in the ground too early for their own good. We are often asked by those ordering from places well north not to ship their trees till the first of May. Now as we are in a warmer region than you, we have to send our trees out earlier than you may be ready to plant them; it is better to have the trees there in your colder climate, as they will remain longer in a dormant condition than if they are kept here where it is warmer and they are better off in your care as above outlined even if they arrive two weeks before you can plant, than to be retained here.

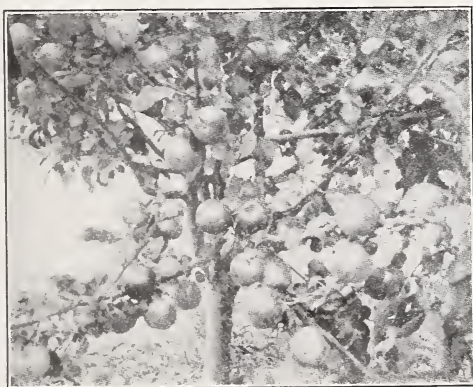


Scarlet Beauty—Big and Red

A word to those who live in a warmer climate; we are often asked to ship "at once" when it is still frozen up here; even though you are out in full leaf, if our stock reaches you in a dormant condition or even if a little started, it is all right; it is the condition of the stock itself that is the important thing, rather than how advanced or how tardy vegetation may be in the place where they are to be planted. We always get a certain number of letters every spring saying "Don't ship my trees—it is all out in bloom here and too late to plant." Now it is usually impossible to start trees from our rather cold, backward region here, till about the 10th of April; by that time foliage is well out in our Illinois territory for instance, but as long as our trees are dormant or only perhaps a little started as they sometimes will be in the box, if cared for and planted as we direct, it is **not too late**; if they are not properly handled it would be too late if there the first of March.

Planting Directions for All Fruit Trees

Trim just the ends of the roots, making a clean, smooth cut. While you may cut the roots off right to a stub and the trees will grow if handled rightly in other ways, we are going back to the old custom of leaving about all the root on the tree that will come in the digging. Of course they are going to be mutilated—that can't be helped—but no matter how little root the tree has if it is trimmed in the top to correspond to the root, it will grow. If you prefer closer root pruning we have no objections.



You Can't Beat Dwarfs for Bearing

Dig a generous hole—larger than the spread of the roots. In the case of fruit trees you will see a little crook near the ground where the tree was budded. With **STANDARD** fruit trees plant so that this crook is an inch or two under ground, but with **DWARF** fruit trees plant so that the crook will be an inch or two above ground. When the ground settles this will be just

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Price Each		Below we indicate size, quality, date when fruit becomes ripe to eat in Western New York, and number of weeks these varieties will keep in cool dry cellar storage at Geneva after ripening. These are not picking dates. Most pears should be picked while hard and ripened in the cellar.				
Standard	Dwarf	PEARS	Size	Quality	Matures	Wk
40c	50c	Anjou	Large	Very Good	Oct.	8
40c	50c	Bartlett	Large	Good	Sept. 5-15	1
—	60c	Bar-Seckel	Medium	Very Good	Oct. 1-10	
\$1	75c	Bosc	Large	Best	Oct. 20-30	2
—	50c	Clairgeau	Very Large	Fair	Oct. 20-30	1
40c	50c	Clapp	Very Large	Very Good	Aug. 20-30	2
75c	75c	Comice	Large	Best	Oct. 15-30	3
—	50c	Duchess	Large	Good	Oct. 15-25	3
40c	50c	Flemish	Large	Very Good	Oct. 1-10	
—	50c	Howell	Large	Very Good	Oct. 20-30	2
—	60c	Idaho	Large	Very Good	Sept.	
40c	50c	Kieffer	Medium	Fair	Oct. 20-30	3
—	50c	Lawrence	Small	Very Good	Nov. 1-10	4
—	50c	Louise Bonne	Large	Good	Oct. 1-10	2
40c	50c	Seckel	Small	Best	Oct. 1-10	3
40c	60c	Sheldon	Medium	Very Good	Oct. 1-10	4
—	50c	Vermont Beauty	Medium	Good	Oct. 5-15	3
—	50c	Wilder	Medium	Good	Aug.	
—	60c	Worden-Seckel	Medium	Very Good	Oct. 20-30	4
		Description				
		Greenish yellow, faintly blushed, fine vinous flavor, one of best keepers.				
		Rich yellow when ripe, high flavor and juicy.				
		Yellow with red cheek and of excellent quality.				
		Dark yellow, often with cinnamon russet. Very rich and sweet.				
		Yellowish brown, deep red cheek, very large, and exceedingly handsome.				
		Pale yellow blushed with red, very rich quality. Should be picked early.				
		Lemon yellow, greenish tinge, flecked with brown russet. Tender, sweet, rich.				
		Greenish yellow. Often streaked with russet. Juicy, sweet. Best as a Dwarf.				
		Pale yellow, reddish brown blush. Very productive.				
		Greenish yellow. Tender, delicious flavor. One of the best.				
		Golden, with russet spots, juicy and excellent flavor.				
		Yellow blushed with red. Rather coarse to eat. Excellent for canning.				
		Greenish yellow, often russeted, very productive and very good.				
		Greenish yellow, blushed cheek, heavy bearer, handsome, best as dwarf.				
		Yellow-brown, russet-red cheek, very juicy, rich, spicy flavor.				
		Somewhat apple shaped, yellowish russet, hardy, very high quality.				
		Yellow, shaded with carmine, sweet and juicy.				
		Pale yellow, red cheek, mildly tart, rich flavor, a good shipper.				
		Yellowish color, larger than Seckel, not quite so rich, but very good.				



Dwarf Comice Pear

With severe dormant pruning and a little Summer pinching back of side shoots, even the little fellows will do their bit.

Dwarf Pear Trees in General— McKay's Dwarf Pears in Particular

Our pears are dwarfed by budding them on quince roots. These are much slower growing than pear roots, hence the resulting tree is restricted to the dwarf style of growth. In America pears have been used as dwarfs more than any of the other fruits, though dwarfed trees of the other fruits are now becoming more widely appreciated, and are equally popular and successful where they are well known.

Dwarfed pear trees may be planted from ten to fourteen feet apart, depending on the size tree the planter intends to secure. They may grow to twelve or even fifteen feet in height, depending on the variety, but can be easily grown to eight or ten feet high when mature by practicing more severe dormant prunings. Dwarfing improves the pear in quality even more than the other fruits. They are the best of the fruits to grow in the pyramid shape, and succeed well trained in the cordon and espalier forms.

All pears require heavy strong soil, clay loam or even strong clay giving far better results than light soils. The standard pears furthermore need dry soil, but as the dwarfs are budded on quince roots they may thrive either on dry or wet ground.

Planting Directions for All Fruit Trees

(Continued from page 5)

about at the surface, where it should be. Evergreens, plant **EXACTLY THE SAME DEPTH THEY STOOD IN THE NURSERY**. Tilt the tree a little toward the prevailing wind; fill in about the roots with **FINELY PULVERIZED SOIL**, and pour in a pail or so of water; add more soil, and more water till it has all filled but the last inch or two, which cover with dry dirt when the water has all settled. This prevents baking. **DON'T TRAMP OR PACK THE SOIL AT ALL—LET THE WATER DO IT ALL**. You can aid the soil working in about the roots by a slight "churning" of the tree till the roots are all covered. **A tree set like this WON'T DIE!**

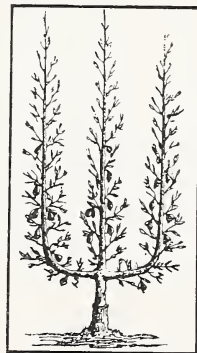
Till the ground becomes firm again the tree can be easily tipped over; and if it shows this tendency, stake it for a few days.

Nursery stock received in the fall may either be planted immediately, or "heeled in" till spring and then planted.

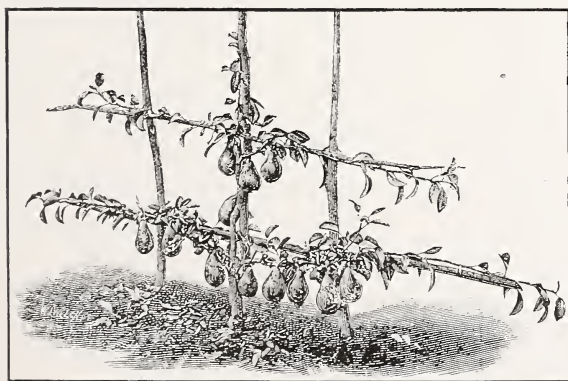
NOW—if this planting is IN THE FALL, mound up about the tree for at least ten inches in height, drawing the soil from far enough away from the tree so as not to leave a "sink hole" for the water to stand near the tree. This has two objects—it is the surest protection from mice, and if your tree should freeze down the first winter, it **won't be hurt below the mounding**, and if you cut off the injured wood, cutting below the mound, it will throw up a new trunk and be just as good as ever. This mound should be pulled flat every spring, and renewed in the fall as a mice and frost protection, till large enough to render it unnecessary.

If the planting is **IN THE SPRING**, instead of mounding, either keep the ground around the trees thoroughly cultivated to preserve moisture or else mulch with coarse manure, chips, sawdust, old rags, grass,—almost anything, in order to keep the ground moist. Mulching is a lazy man's way perhaps, but a good way for all that; still, if the soil around the tree is stirred every few days it is equally as well, perhaps better, than mulching. Then of course, mound up in the fall as stated above.

NEVER PUT MANURE OR ANY FERTILIZER WHERE IT WILL COME IN CONTACT WITH THE ROOTS. Instead of mixing it with the dirt filled in on the roots, wait till the tree is planted and fertilize or mulch the surface soil surrounding the tree. Manure or fertilizer in contact with roots may burn and cause severe injury. This applies to all shrubs, plants and fruit trees.



Three Branched Trained Pear



Horizontal Arm Trained Espalier

This shows one of the many interesting espalier forms to which dwarfs may be grown when the planter is training them to fancy shapes.

Double-Worked Pears

Bosc and Sheldon are the two dwarf pears on our list which do not succeed well budded on quince roots. We therefore "double-work" them to secure thrifty dwarfs of these varieties. With our trees this double-working consists of first budding the Duchess pear on quince to dwarf it, then when this tree is a year old we bud the Bosc or Sheldon on the Duchess wood. The Duchess is then cut off above this new bud, which thereafter grows to form the dwarf tree of Bosc or Sheldon as the case may be.

PRICE Each		Below we indicate the color, size, flavor and quality of the varieties offered. In a normal year the entire cherry season for this list of varieties lasts from about June 25th to about July 20th at Geneva. Note that Dwarfs are offered only where a price is indicated opposite the variety.						
Standards	Dwarfs	CHERRIES	Color	Size	Flavor	Q'ty	Season	Remarks
50c	\$1	Bay State	Very Bright Red	Large	Mildly Acid	Very Good	Mid-season	Especially handsome on tree. Rather acid to eat, tho relished by the writer.
60c	—	Bing	Dark Purplish Red	Very Large	Sweet	Very Good	Late Mid-season	One of the biggest and most attractive; unsurpassed in quality.
50c	\$1	Black Tartarian	Purplish Black	Medium	Sweet	Best	Early	A well known favorite, one of the best for home planting.
50c	—	Early Richmond	Light Red	Medium	Mildly Acid	Very Good	Early	A good culinary cherry, our earliest sour. Refreshing to eat when fully ripened.
50c	\$1	English Morello	Very Dark Red	Medium	Tart	Good	Very Late	Too acid to eat unless very ripe. Fine to cook. Hangs very long on trees.
—	\$1	Governor Wood	Yellow White Blushed	Medium to Large	Sweet	Very Good	Early	Bears young; beautiful and delicious; excellent qualities for home use.
60c	—	Lambert	Very Dark Red	Large	Sweet	Very Good	Mid-season	Large, superb flavor, one of the handsomest of the dark sweet cherries.
50c	\$1	Marguerite	Light Red	Very Large	Mildly Acid	Very Good	Very Late	Late, attractive size and color, valuable market sort, fine for home use.
50c	\$1	Montmorency	Red	Medium	Tart	Good	Mid-season	Most popular sour cherry for market, cannery and home as a cooking variety.
50c	\$1	Napoleon	Bright Red over Yellow	Very Large	Sweet	Very Good	Mid-season	Firm flesh, handsome high quality, productive, the leading white sweet cherry.
50c	—	Ostheim	Very Dark Red	Medium	Tart	Fair	Very Late	Much used in Prairie states of Middle West, very hardy and very productive.
—	\$1	Princess Christine	Bright Red	Medium	Tart	Very Good	Late	Fifteen days later than Montmorency which it resembles; equal in quality.
50c	\$1	Rockport	Amber Yellow Blushed	Large	Sweet	Very Good	Early	Rich, sweet, tender, as good as any to eat out of hand.
50c	\$1	Royal Duke	Bright Red	Medium	Mildly Acid	Very Good	Early	Pleasantly flavored, juicy, refreshing, one of the best of the Duke cherries.
50c	\$1	Schmidt	Purplish Red	Large	Sweet	Good	Mid-season	Glossy black, of tempting appearance, one of the best in our locality.
50c	\$1	Windsor	Very Dark Red	Medium	Sweet	Very Good	Late Mid-season	Very firm, almost black when ripe, very desirable for home use and market.
50c	\$1	Yellow Spanish	Yellow Blushed	Very Large	Sweet	Best	Mid-season	Very sweet and rich, but too tender to market easily without injury.

Dwarf Cherries, Sweet and Sour

Cherries, like the other fruits, are dwarfed by propagating on slower growing roots than we use for the standard trees. The sweet varieties may be planted ten to fifteen feet apart, ten feet being amply sufficient where you plan to make the annual dormant pruning severe to aid toward inducing the more dwarf habit of growth. The sour cherries are generally smaller growing and may be planted from eight to twelve feet apart. Cherries do well in almost any soil, except that **it must not be wet**. In the entire eastern part of the United States, except for the apple, probably no fruit does so well as the cherry. In northern New York and the coldest parts of New England the sweet cherries do not stand the severe winter cold, but there are very few localities where the sour cherry can not be grown. Dwarf cherries most naturally grow in the bush form. Sweet varieties are stronger growers than sours, while the sours are inclined to begin fruiting almost right away. Under average conditions the sweets may require three or four years to begin fruiting. Both the sweets and sours are wonderfully beautiful in the spring blooming—fully as ornamental as your spring-flowering shrubs. By selecting say four varieties which ripen in succession you can have cherries for three or four weeks.

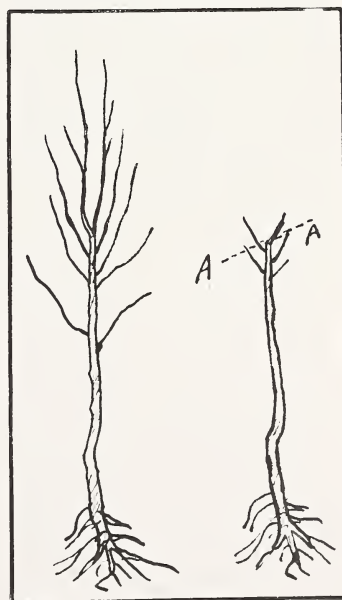


A FOUR YEAR DWARF
Good Prospects for Cherries

Trimming Directions for Standard Fruit Trees

For a medium height head, take our fruit trees, excepting peaches, just as they come from the nursery and trim such branches as you wish to leave for the future framework of the tree, cutting back about half the young growth, "cutting to a bud"—a slanting cut, just above the bud. Remove entirely all branches not wanted to form the framework of the tree. For a high head, trim off all branches except the tallest or central one, which will be your "leader;" cut this off at whatever height you desire the future head to be. If you want a low-headed tree, cut it off at whatever height you desire the head to form.

There is a wide difference of opinion among good fruit men as to the best way to trim a newly planted fruit tree ranging all the way from those who advocate no trimming whatever, to those who advocate cutting every branch of the new tree right down to two or three buds. I think that most of us will agree on a few points; that in apples, pears, plums, cherries and quinces, all branches should be cut off close to the trunk, that are not wanted for the framework of the tree; how these that are left should be trimmed is much disputed. We have been advocates of very close trimming, but I am inclined to think that at least half the length of the branches that are left for framework, may be left on the tree, and I have seen instances in apples and pears especially where they did better if these branches were left uncut.



The proper way to trim standard apple, pear, plum or cherry, when received from the nurseryman. "A" indicates where untrimmed tree was cut to head the tree just where wanted.

PRICE Each		The season of European plums at Geneva lasts from about July 15th to about Oct. 5th. The season of those plums listed here will therefore, as indicated below, last from the middle of August to early October. We have as standards only those as offered by the indication of price.				
Standard	Dwarf	EUROPEAN PLUMS	Color	Quality	Season	Remarks
50c	—	Agen	Violet Purple	Best	Late	One of best dessert plums. Should be in every home orchard. Very productive.
50c	60c	Arch Duke	Reddish Purple	Good	Late	Firm, good shipper and keeper; desirable for home and market. Very productive.
50c	75c	Bradshaw	Reddish Purple	Good	Mid-season	Large, attractive; ship and keep well. Very productive. Very large. Has quality.
50c	75c	Fellenburg	Purplish Black	Best	Late	Very large, somewhat tart; finely flavored flesh, cooked or dried.
50c	60c	French Damson	Dull Black	Good	Late	Sweet and juicy; the largest of the Damson Plums.
50c	75c	German Prune	Purplish Black	Very Good	Late	Excellent for all culinary purposes, especially canning. Long fruiting season.
50c	60c	Lombard	Purplish Red	Best	Mid-season	Inferior quality to eat, but popular. Very hardy. Good canned or spiced.
50c	75c	Palatine	Greenish Yellow	Very Good	Mid-season	Juicy, sweet, pleasant flavor. Fairly immune to black knot. High quality
50c	75c	Pearl	Golden Yellow	Best	Mid-season	Trees rather unproductive, but has sweet luscious flavor. Best of all plums. Large.
—	60c	Pond	Purplish Red	Fair	Late	Quality not high, but one of the beauties for size, shape and color.
50c	75c	Reine Claude	Yellowish Green	Very Good	Late	Rich flavor, juicy, fine for both dessert and market. Best of green plums. Productive.
—	75c	Sannois	Reddish Purple	Very Good	Very Late	Rather unattractive, but fine flavor and quality. Very late season.
50c	60c	Shropshire Damson	Purplish Black	Good	Late	Not a dessert variety, but one of best for jam and jelly. Should be in every garden.
50c	60c	Yellow Egg	Golden Yellow	Fair	Late	More suitable for cooking than eating fresh. Largest and handsomest yellow plum.
Stds.	Dwarf	JAPAN PLUMS	Color	Quality	Season	Remarks
50c	60c	Abundance	Dark Red	Good	Early	Develops flavor best picked "hard ripe." A fine variety, very productive.
—	75c	Apple	Dull Dark Red	Good	Mid-season	Dark red flesh, peculiar pleasant flavor, only semi-hardy, fruit keeps remarkably long.
50c	60c	Burbank	Dark Red	Good	Early	Attractive appearance, flavorful, very productive, long fruiting season.
50c	75c	Chabot	Shades of red	Good	Mid-season	The beauty of the Japan Plums, good keeper; to get best flavor pick and ripen in dark.
50c	60c	October Purple	Dark Red	Good	Rather Late	Attractive, very large, very juicy, keeps well, long fruiting season.
50c	60c	Red June	Garnet Red	Fair	Early	Sweet except at center, productive, hardy, valuable as an early variety.
—	60c	Satsuma	Dark Dull red	Good	Rather Late	Flesh dark red, juicy, high quality for eating or cooking, keeps and ships well.
—	75c	Sultan	Deep red	Good	Rather early	Juicy, pleasant flavor, very productive, particularly excellent for culinary use.
50c	—	Wickson	Dark red	Good	Rather early	Possibly largest of all plums, somewhat tender, long fruiting season, very handsome.



Lombard

Native American Plums

Dwarfs only, \$1.00 each, \$10.00 per doz.

Ripe from Aug. 20 to Sept. 30 at Geneva

✓ **Hammer**—Crimson, fine flavor, handsome, very hardy.

✓ **Quaker**—Dark red, sweet pleasant flavor, large. Good quality.

Surprise—Dark red, pleasant, attractive, productive.

Terry—Dark red with yellow flesh. Large and good.

Wild Goose—Bright red, refreshing flavor, good quality.

Cheresota—The only one of the **Hansen Hybrid** varieties I can offer this season, as last spring's demand took every tree we had of the other varieties. It is a cross of the native Sand Cherry with De Soto plum, being the same parentage as the Compass Cherry offered by Western nurserymen, but is much larger and better quality. The trees are **perfectly hardy**. The fruit is longish in shape from 1 to 1½ inches in diameter. When ripe it is a glossy black, of pleasant flavor, particularly excellent for jam and jelly. **Should bear first year you plant it!**

Dwarf Plums, European, American and Japanese

Dwarfed on slower growing roots than our standard plums, the dwarfs may be planted ten or twelve feet apart, some planters claiming to get good results planted even a little closer than this when they are well managed by giving strong dormant prunings. Plums are not half appreciated. I agree with Professor Hedrick who says in *Plums of New York*, "Of all the stone fruits, plums furnish the greatest diversity of kinds. Varieties to the number of two thousand, from fifteen species, are now or have been under cultivation. These varieties give a greater range of flavor, aroma, texture, color, form and size, the qualities which gratify the senses and make fruits desirable, than other of our orchard fruits."

The best known class of garden plums, the Europeans, are so called because introduced from Europe in early Colonial days. They are characterized by solid meaty flesh and free stone pits. The season of European varieties at Geneva lasts from about July 15th to about October 5th.

The Japan plums differ widely from the Europeans. As a class they have a distinctive flavor. They are almost as hardy as European plums, thrive over a wide range of territory and are particularly valuable in the Southern states where the others fail. They make fine dwarfs, Burbank and Abundance being among the best. At Geneva their season lasts from about July 20th to about September 20th.

Perhaps the finest of plum flavors are found among varieties of the native American plums. They vary much in size and flavor and are among the hardiest of our plums. With us at Geneva they are mostly in season between August 20th and September 30th.



A Three Year Dwarf Plum

PRICE each		Below are given the characteristic color, size and quality of the varieties we offer. The ripening dates given are those to be expected at Geneva, or other localities with similar seasons, in a normal year. This list includes the choicest varieties.						
Standard	Dwarf	PEACHES	Flesh	Size	Quality	Ripens	Remarks	
30c	60c	Abundance	White	Medium	Good	Aug. 7	A strain of Alexander, but larger and better.	
30c	—	Belle of Ga.	White	Large	Good	Sept. 10	Popular for its great beauty. Good variety for home use.	
30c	—	Carman	White	Medium	Very Good	Aug. 15	Adapted to particularly wide range of soil and climate.	
30c	—	Chair's Choice	Yellow	Very Large	Very Good	Oct. 8	Almost unsurpassed quality of the Crawford type.	
30c	60c	Champion	White	Medium	Very Good	Aug. 25	Choicest of white flesh peaches but requires best peach soils.	
30c	60c	Crawford Early	Deep Yellow	Large	Very Good	Sept. 1	One of the handsomest and very best in quality.	
30c	—	Crawford Late	Yellow	Very Large	Very Good	Sept. 15	Considered by many the best yellow flesh peach.	
40c	—	Crimson Beauty	Yellow	Medium	Very Good	Sept. 1	Handsome crimson, and worth a trial in the home garden.	
30c	—	Crosby	Deep Yellow	Medium	Very Good	Sept. 20	Fine flavor and very hardy. Particularly spicy when cooked.	
30c	60c	Elberta	Yellow	Very Large	Fair	Sept. 15	The great commercial variety. Bears early, and very productive.	
40c	60c	Eureka	White	Large	Good	Sept. 20	Has a rather long fruiting season.	
30c	60c	Fitzgerald	Yellow	Large	Very Good	Aug. 28	Similar to Early Crawford, but somewhat more productive.	
30c	—	Foster	Deep Yellow	Large	Very Good	Sept. 10	Fine quality, very similar to Late Crawford, less productive.	
30c	—	Frances	Yellow	Large	Good	Sept. 25	Has a rich, vinous flavor. A fine sort for the home garden.	
30c	—	Greensboro	White	Large	Fair	July 30	Very showy, productive and early bearing.	
30c	—	Lamont	Light Yellow	Very Large	Good	Sept. 25	Similar to Early Crawford, more productive, fine for home use.	
50c	75c	McKay Late	Yellow	Large	Good	Oct. 15	Excellent for so late, fair to eat, splendid for cooking.	
30c	60c	Niagara	Yellow	Large	Very Good	Aug. 28	Rather light bearer, but an excellent Crawford type peach.	
50c	75c	New Hale (JHH)	Yellow	Very Large	Good	Sept. 10	Budded from trees secured from the originator.	
30c	60c	Old Mixon Free	White	Large	Very Good	Sept. 15	Rather unproductive, but rich flavor and unusually handsome.	
30c	60c	Salway	Golden Yellow	Large	Very Good	Oct. 10	Not a first class dessert peach but one of the best for canning.	
—	60c	Smock	Yellow	Large	Good	Oct. 1	Useful only as an excellent preserving and canning variety.	
30c	—	Stump	White	Large	Very Good	Sept. 15	An old favorite, not handsome, but of the finest quality.	
30c	—	Waddell	White	Medium	Very Good	Aug. 15	Competes with Carman, but is larger and very pleasing.	
40c	60c	Willett	Yellow	Large	Good	Oct. 1	Semi-cling, similar to Carman but even better flavored.	
30c	60c	Yellow St. John	Yellow	Medium	Very Good	Aug. 20	Uncertain bearer, but wonderfully handsome and flavorful.	

The Dwarf Peach

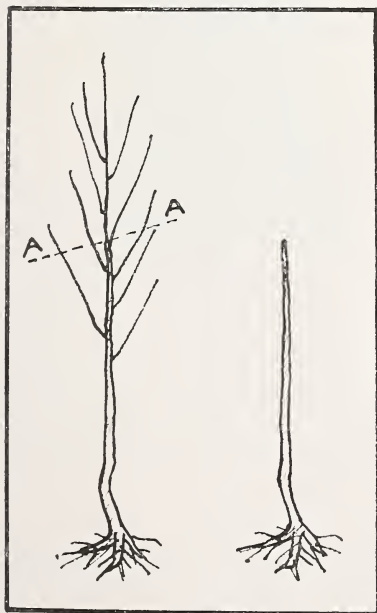
Dwarf peaches seem to speak for themselves. Scarcely an order comes without including at least a tree of this fruit. Had it not chanced that to most of mankind the peach is free for the growing of it, we would surely prize it as a luxury. It is the one of our northern fruits which is tropical in it's lusciousness. We can not now supply all the varieties offered last season, but expect next year to again be able to meet the demand with a full list of kinds including a few choice sorts we have not grown before.

In dwarfing our peaches we use roots which after considerable experience seem best for the purpose. These trees grow so rapidly for a year or two that they might almost be mistaken for standards instead of dwarfs, but after the second or third year the dwarf characteristics become unmistakably evident.

Plant the trees eight or ten feet apart. Don't forget to give them a good stiff pruning each spring and grow them six or eight feet high at most. A row of these little trees at the side of the garden are a true delight in "Peach Season." In the little garden planted for the family and for "Dad" to putter in, he wants a sequence of varieties chosen for quality and if he wishes can secure each summer two solid months of "Peaches almost every day."



How is this for a Young Peach?
The Dwarfs will Bring the Fruit



This shows a standard peach tree as it comes from the nursery, and the same tree after it has been planted and properly pruned.

Pruning Standard Peach Trees

Peach Trees—Unless the tree is a very large one, trim off all branches right up to a "whip," then cut off the top of the tree at whatever height you want the head to form. If the tree is large, say five or six feet high and having a somewhat thick bark, then cut as above all except the limbs wanted for the framework of the tree, and trim these back to a short stub of one or two buds. The only reason for leaving them is that a new bud will force its way more surely from this smaller stub, than from the heavier trunk. Then head off at the height desired as above directed. If a very low headed peach tree is wanted, it is better to buy the smaller sizes as they will stand heading off down low better than larger trees. After the first year we trim peach trees severely every spring, but all the other fruit trees we trim only to give them proper shape and to cut out superfluous or crossed limbs.

Quince Bushes

60c each, \$6.00 per doz.

Bourgeat—A stronger grower even than Champion and shows the same tendency to produce fruit right in the nursery row. A late keeper.

Champion—A very vigorous grower, and bears young. Fruit very large, lively yellow color, cooks very tender.

Orange—Large, round, golden fruit, valuable for preserves and flavoring. A weaker grower than the last two, but the best for commercial planting.

Pineapple—Flavor suggestive of the pineapple. Makes a superior jelly, or may be eaten raw.

Rea's Mammoth—Large, golden yellow; flesh cooks as tender as the apple, flavor delicate, imparting delicious quince taste and odor to any fruit with which it is cooked.

Sweet Winter—Medium sized, pear-shaped, beautiful fruit. Quite late, rather sweet, a little gem for the home garden.



Champion Quince



McKAY'S GIANT ASPARAGUS



McKAY'S MAMMOTH RHUBARB

McKAY'S GIANT—A most delicious variety and a great cropper. 50c per 25, 75c per 50, \$1.25 per 100.

McKAY'S MAMMOTH—A very strong growing, tender, delicious variety. Every garden should have a row of rhubarb. Plant any time, burying the whole plant about three inches from the surface. You almost can't kill them. 25c each, \$2.50 per doz.

Planting Directions for Asparagus

In heavy soil dig a trench so that when planted the crown shall be from 6 to 9 inches below the surface when planted; in light soils, from 8 to 12 inches. If the rootlets are long, shear them off to half length. Cover the crowns only about two inches filling in gradually around the stem as it grows up till the ground is leveled again. **FEED HEAVILY.** I prefer a fall planting of Asparagus, still it may be handled either way. If it has started when you receive it in the spring, be careful not to cover up the stalk, but cover around it lightly, gradually filling up.

GRAPES—Strong Two-Year Old Vines

Listed in approximate order of ripening

25c varieties are \$2.50 per doz.
 30c " " \$3.00 per doz.
 35c " " \$3.50 per doz.
 40c " " \$4.00 per doz.
 45c " " \$4.50 per doz.
 50c " " \$5.00 per doz.

✓ **Moore's Early**, 30c—Purplish black, hardy, good quality and juicy. Standard early grape of New York.

✓ **Winchell**, 50c—Light green, one of the earliest and best green grapes, hardy, very productive, a good keeper.

✓ **Jessica**, 40c—Light green, sweet, rich and hardy, a good variety which comes from Canada.

✓ **Lady**, 40c—Light green, sweet, rich, juicy, hardy, one of the highest quality seedlings of Concord.

✓ **Early Victor**, 35c—Purplish black. Best of the very early black grapes. Fine flavor, hardy, productive.

✓ **Campbell's Early**, 40c—Dark purplish black, clusters large, good quality, hardy, productive, juicy.

✓ **Worden**, 30c—Glossy black, juicy, very good, large clusters, hardy, productive.

✓ **Brighton**, 40c—Red, large clusters, handsome, vinous flavor, one of the best red grapes.

✓ **Delaware**, 40c—Light red, delicious and handsome fruit, the best American table grape.

✓ **Empire State**, 35c—Pale yellowish green, hardy, very juicy and tender, one of the best green table grapes.

✓ **Moore's Diamond**, 30c—Green. In quality ranks next to Winchell, hardy, productive, a good all round grape.

✓ **Salem**, 35c—Very dark red. A valuable garden grape of high quality, unusually hardy.

✓ **Niagara**, 25c—Green. Clusters large, productive, quality excellent, the leading American table grape.

✓ **Concord**, 25c—Black, hardy, productive, refreshing flavor, a handsome table grape known to all.

✓ **Barry**, 45c—Glossy black, flavor delicate, sweet, hardy, productive, one of the best blacks.

✓ **Agawam**, 30c—Dull purplish red, large clusters, rich, sweet, attractive, keeps till mid-winter.

✓ **Catawba**, 25c—Dark purplish red, sweet, rich, high quality, attractive, hardy, productive.

✓ **Jefferson**, 45c—Glossy red, large clusters, very hardy, very juicy, possibly the best red garden grape.



Brighton

Grape Culture

Grapes like a warm, loose, well drained soil. Plant in rows six to eight feet apart and six to twelve feet apart in the row. For garden culture of course it is customary to plant closer, according to the room one has.

At planting cut back to three or four buds. Allow only the two strongest buds to grow, these the following year being attached to the lower wire of the trellis and becoming the arms shown in figs. 1 and 2, from which each succeeding year canes are allowed to grow to bear the season's fruit. The winter following fruiting, these canes that bore the last crop are cut back to within two or three buds from the arm, and the next spring one bud is allowed to grow from each joint. In trimming always develop the fruit shoots or canes from a point as near the arm as possible so as to keep the "spurs" shown in fig. 1 as low down as possible.

In all grape trimming bear in mind this one thing—that the fruit is borne at the base of this year's shoots coming from wood formed last year. Applying this general principle you can train a grape up to a stake and plant quite closely for garden culture, and still trim your vine so as to get the best results, making it into a trunk from which bearing wood is kept growing the same as in the method described above.



Fig. 1. Vine properly trimmed during winter

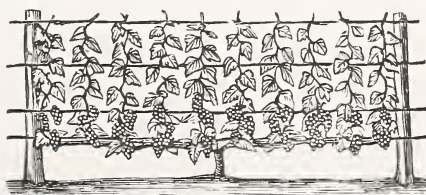


Fig. 2. Same Vine above, Fruiting Following Fall

Per 6	Per 12	Per 25	Per 50	Per 100	RASP-BERRIES	Color	Remarks
60c	\$1.00	\$1.60	\$2.75	\$4.50	Columbian	Purple	Very large; high flavor; fine for canning; productive, hardy.
50c	75c	\$1.25	\$2.00	\$3.50	Cumberland	Black	Very large, glossy berries; firm, juicy, sweet heavy cropper.
50c	75c	\$1.25	\$2.00	\$3.50	Cuthbert	Red	Good size, firm, sweet and luscious. A great market berry.
60c	\$1.00	\$1.60	\$2.75	\$4.50	Golden Queen	Yellow	Amber color; fine quality; firm; remarkably productive.
50c	75c	\$1.25	\$2.00	\$3.50	Gregg	Black	One of the most valuable; large, good quality, very meaty, firm.
60c	\$1.00	\$1.60	\$2.75	\$4.50	Herbert	Red	Very large and productive; fine, rich flavor; extremely hardy.
80c	\$1.40	\$2.20	\$3.50	\$6.00	June	Red	Ripens end of June; very heavy yielder; a remarkable berry.
50c	75c	\$1.25	\$2.00	\$3.50	Marlboro	Red	Large, crimson, fine flavor; early, productive, very lasting.
50c	75c	\$1.25	\$2.00	\$3.50	Plum Farmer	Black	This is the Early Black , with quality, productiveness, hardiness.
60c	\$1.00	\$1.60	\$2.75	\$4.50	St. Regis	Red	Bright crimson; large berries, all through summer and fall.

Care of Raspberries and Blackberries—When these are first planted it makes no difference if these tops are trimmed or not as they are worthless for fruit production. The growth which give you bearing wood will come from below the ground. These plants fruit on canes which grew the preceeding year, and which became worthless after they have once fruited. Therefore the following winter they should be cut off to the ground to make room for the new fruit-bearing canes. During the growing season blackberries may be headed-in by cutting off two to four inches of the canes as they attain a height of two and one-half to three feet. Black raspberries may be cut the same way when about two feet high. This forces the growth of lateral shoots on the canes, and it is these laterals which bear most of the fruit. Instead of heading-in red raspberry canes during the growing season, they are often best left till winter and then cut back somewhat.

Per 6	Per 12	Per 25	Per 50	Per 100	BLACK-BERRIES	Remarks
60c	\$1	\$1.60	\$2.75	\$4.50	Blowers	Fine flavor, unusually free from seeds, productive, one of the very best.
50c	75c	\$1.25	\$2.00	\$3.50	El Dorado	Medium size, jet black berries; flavor sweet and rich; very hardy.
50c	75c	\$1.25	\$2.00	\$3.50	Mersereau	Early season; good size, handsome fruit; juicy, sweet and good quality.
50c	75c	\$1.25	\$2.00	\$3.50	Snyder	Medium size, sweet and melting; very hardy and enormously productive.
50c	75c	\$1.25	\$2.00	\$3.50	Taylor	Very large; fine quality, without core; very productive and hardy.

Ea.	Per Doz.	GOOSE-BERRIES	Color	Remarks
25c	\$2.50	Downing	Whitish Green	Large, soft and juicy, smooth skin, prolific.
20c	\$2.00	Houghton	Pale red	Small or medium size, sweet, very productive.
25c	\$2.50	Pearl	Whitish green	Fruit large, excellent flavor, prolific.
30c	\$3.00	Smith's	Light green	Large, flesh firm and very sweet.

Care of Currants and Gooseberries—These need little pruning the first two or three years, except to cut back a few inches from the new shoots during the growing season to develop fruit spurs along the length of the canes. The canes of these plants bear fruit a number of times, but the first two or three crops are the best. Therefore, after the plants begin bearing, it is good practice to remove one or more of the oldest canes each winter. This forces the growth of new canes, and the bush is thereby constantly renewed.

Ea.	Per doz.	CURRENTS	Remarks
15c	\$1.50	Cherry	One of the largest red currants; very productive.
15c	\$1.50	Pay's Prolific	A popular red currant, very large and sweet, productive.
25c	\$2.50	Perfection	Large, bright red berries in large clusters, big crops.
15c	\$1.50	White Grape	Very large, white, sweet or mildly acid, a fine bearer.

MCKAY'S ROSES

RAMBLERS

Very strong growers. Bloom profusely once a year on last year's wood.

Crimson Rambler, 30c, deep crimson.

Dorothy Perkins, 25c, shell pink.

Flower of Fairfield, 35c, an everblooming Crimson Rambler.

CLIMBERS

Baltimore Belle, 30c, bluish white, an old favorite, blooms once a year.

Climbing American Beauty, 45c, crimson, large globular flowers, blooms in June and a little during the summer.

BABY ROSES

Very dwarf growing, and bloom incessantly from June till November.

Baby Rambler, 50c, crimson, the "original" Baby Rambler.

Phillis, 50c, bright carmine-pink.

White Baby Rambler, 50c, white and constantly in bloom.

SUMMER ROSES

Bloom once a year—on last year's wood.

Mme. Plantier, 40c, profuse snow white blooms in heavy clusters.

Persian Yellow, 50c, deep yellow, hardy.

HYBRID TEAS

This class will bloom almost constantly from May till October frosts.

Clothilde Soupert, 60c, flesh-white, with rosy center.

Gruss an Teplitz, 60c, scarlet, constantly in bloom, a good bedding rose.

Hermosa, 60c, pink, one of the old popular varieties.

Juliet, 60c, old gold and red.

Killarney, 60c, pink, a favorite bedding rose.

Mme. Caroline Testout, 60c, clear rich pink, edged with silvery-rose.

Margaret Dickson, 60c, white with flesh-colored center.

Ophelia, 60c, salmon color, shaded with rose.

Trimming Roses—When first planted trim off to within three or four inches from the ground; after that every year trim the Hybrid Perpetuals, Mosses, Hybrid Teas, and similar classes of roses as much as you have the heart to do, **EARLY**.

These roses bloom from **this year's** wood, and to keep them blooming, you must keep them growing. The Climbers, Ramblers, Madam Plantier, and Persian Yellow bloom from **last year's** wood, and more must be left on to get the bloom. **DO NOT TRIM BABY RAMBLERS AT ALL**, at least till it gets large, after several years. It's a little plant, blooms all the while and needs all the wood it can make.



Frau Karl Druschki

HYBRID PERPETUALS

Bloom in spring, and again more or less freely in the fall. Hardier than the Hybrid teas.

Alfred Colomb, 60c, crimson, full finely shaped flowers.

Coquette des Alps, 60c, blush white, and will bloom almost constantly.

Frau Karl Druschki, 60c, white, a constant bloomer, the best white rose.

General Jacqueminot, 60c, bright crimson, very free blooming.

Magna Charta, 60c, pink, large flowers, a strong grower.

M. P. Wilder, 60c, crimson, full flowers, extra large.

Mrs. John Laing, 60c, soft pink; very fragrant, blooms throughout season.

Paul Neyron, 60c, pink, shading to rose, extra large flowers.

P. C. de Rohan, 60c, deep maroon of velvet-like texture.

Mme. Cochet, 60c, rich coral-pink, shaded with rosy crimson.

Hardy Upright Shrubs

Price Each	SHRUBS	Height Growth Feet	Season of Bloom	Color	Remarks
50c	Althea, Ardens	8 to 10	Aug. Sept.	Light Purple	Blossoms Double
50c	Althea, Colestis	8 to 10	Aug. Sept.	Light Blue	Slightly Double
50c	Althea, Elegantissima	8 to 10	Aug. Sept.	White	Slightly Double
50c	Althea, Jean d'Arc	8 to 10	Aug. Sept.	White	Double
50c	Althea, Rubra	8 to 10	Aug. Sept.	Red	Large Single
50c	Althea, Totus Alba	8 to 10	Aug. Sept.	Pure White	Large Single
40c	Barberry, Purple-leaved	6 to 8	May	Yellow	One of the best purple foliated shrubs. Red berries in fall and winter.
35c	Barberry, Japan	4 to 6	May	White	Green summer foliage, brilliant fall colors, bright red winter berries.
50c	Cornus Siberica, Red Bark Dogwood	8 to 12			Valuable for its attractive very bright red bark in winter.
50c	Deutzia, Candida	8 to 12	June	Pure White	An abundant bloomer of very beautiful double blossoms.
50c	Deutzia, Crenata	5 to 6	June	White Pinkish	Spikes of double flowers, tea green foliage.
40c	Deutzia, Pride of Rochester	8 to 12	June	Pinkish White	One of the best Deutzias; profuse blooms of large double flowers.



Weigela Eva Rathka



Althea, or Rose of Sharon

Hardy Upright Shrubs

Each Price	SHRUBS	Height Growth Feet	Season of Bloom	Color	Remarks
45c	Fringe, Purple (Smoke Tree)	10 to 12	July Sept.	Smoke	Pea green leaves; tree in bloom has appearance of a cloud of smoke.
40c	Honeysuckle, Red Tartarian	6 to 8	May	Bright Pink	Very fragrant bloom; bright colored fruit in autumn.
40c	Honeysuckle, White Tartarian	6 to 8	May June	White	Similar to the Red Tartarian, flowers very large.
40c	Hydrangea, P. G. (Bush form)	6 to 10	July Sept.	White	Immense yellowish-white blooms changing first to pink, later to bronze.
50c	Lilac, Common, White or Purple	8 to 10	May	White & Purple	Known to all. Prune well after each blooming to keep bushy.
60c	Lilac, Persian	4 to 6	May	Purple	Smaller foliage than the common; bright purple flowers.
30c	Privet, California	8 to 12			A desirable hedge plant. Can be sheared to any height or any form.
50c	Prunus Triloba	8 to 12	May	Pink	An ornamental flowering plum; profuse double pink blooms.
40c	Snowball, Common	6 to 10	May June	White	Greenish white blooms in great profusion on drooping branches.
40c	Spirea, Anthony Waterer	2 to 3	July Aug.	Bright Crimson	One of the finest dwarf varieties for shrubbery border; blooms all summer.
45c	Spirea, Aurea		June	White	Tall and very effective on account of its bright yellow foliage.
40c	Spirea, Callosa Alba	3 to 4	June Sept.	White	Dwarf, bushy, symmetrical shrub; keeps in bloom all summer.
40c	Spirea, Callosa Rosea		June Aug.	Red	Deep rose red flowers in close clusters, lasting nearly all summer.
45c	Syringa, Golden	3 to 4			Medium dense growth; golden yellow foliage, holding its color all summer.
40c	Weigela, Candida	5 to 8	June Aug.	White	Flowers pure white; continues to bloom through summer, even till fall.
40c	Weigela, Eva Rathka	5 to 8	June	Crimson	A beautiful weigela with brilliant crimson blossoms.



Purple Fringe



Lilac

Paeonies

Couronne d' Or—Very large blooms, beautiful pure white with yellow center, the central petals delicately flecked with carmine, 60 cts. each, \$6.00 per doz.

Duchess de Nemours—Sulphur-white cup-shaped blooms. One of the best late white sorts. The half open bud is particularly beautiful.

50 cts. each, \$5.00 per doz.

Festiva Maxima—A superb white bloom, the finest white paeony in cultivation. 50 cts. each, \$5.00 per doz.

Louis Van Houtte—Very double, bright cherry red. 40 cts. each, \$4.00 per doz.

Officinalis Rubra—An early flowering variety, one of the darkest sorts, a dark rich crimson. 40 cts. each, \$4.00 per doz.



Hardy Herbaceous Paeony

Clematis

Clematis, Henryii, 50c—Best of large flowering white varieties; grows to height of 10 to 12 feet. Fine for trellises, flowers in August.

Clematis, Jackmanii, 50c—This is the best purple variety. Blossoms noted for velvety richness. An abundant and successive bloomer. Blooms July to Sept.

Clematis, Madam Edward Andre, 50c—Large beautiful, bright velvety red blossoms, free and continuous bloomer. 8 to 10 feet. Blooms from July to September.

Clematis, Paniculata, 30c—Hardy, one of most desirable and useful vines. Has fine foliage, profuse bloomer. White star shaped, fragrant flowers. Blooms in Sept.

Climbing Vines

American Ivy, (Virginia Creeper), 30c—Rapid grower. One of best vines for covering walls, trees or verandas. Rich crimson foliage in autumn.

Ampelopsis Veitchii, (Boston Ivy), 50c—Clings to stone, brick or cement only; leaves overlap forming a dense green which turns to rich crimson in autumn. Bears clusters of dark blue berries.

Dutchman's Pipe, 50c—Hardy, much used for porches. Its yellowish brown flowers are shaped like a Dutch pipe, grows very rapidly.

Honeysuckle, Hall's Japan, 35c—Best bloomer of all. Very fragrant, flowers white changing to yellow, blooms from July to Sept. Grows well in sun or shade.

Honeysuckle, Monthly Fragrant, 40c—A vine that blooms all summer, very fragrant. Handsome foliage and fruit, blossoms red and yellow.

Honeysuckle, Scarlet Trumpet, 45c—A familiar old fashioned flower, rapid grower, bears long slender trumpet-like flowers.

Trumpet Vine, 50c—This makes a fine screen, rankest grower of all our climbers, bears orange-red flowers, bigger and earlier than Scarlet Trumpet.

Wisteria, (Chinese Purple), 50c—Very rapid grower, growing from 15 to 20 feet, in a season. Has foot long flowers of pale violet, blooming in May and June.

Wisteria, (White Chinese), 50c—Blossoms are a pure white, has the same good qualities as Purple, but a somewhat lighter grower.



Clematis Jackmanni

Ornamental and Shade Trees

Birch, American White, 75c—A rather small tree with smooth white bark and handsome foliage. Very effective when planted in front of evergreens to afford strong contrast.

Birch, Cut-leaf, \$1.00—Its tall, slender, graceful drooping branches, silvery white bark, and delicately cut foliage make it one of the finest ornamental lawn trees.

Catalpa Bungei, \$1.00—Makes an umbrella shaped top without pruning. Leaves large, heart shape, lying like shingles on a roof. Always makes a symmetrical head.

Catalpa, Speciosa, 60c—Blossoms in July when few trees are in blossom. Flowers are large, showy and fragrant, followed by hanging pods eighteen inches long.

Chestnut, American, 75c—One of the handsomest trees when in full bloom. Desirable for its sweet and delicious nuts. Will grow to an ultimate height of 50 feet.

Linden, American, \$1.00—A rapid grower suitable for lawns. It bears fragrant yellow blossoms, which are followed in the fall by beautiful golden foliage.

Maple, Silver Leaf, 75c—Where quick results are wanted, this is one of the best. The silver under-surface of the leaves gives it a very handsome appearance.

Mulberry, Russian, \$1.00—Very hardy, a vigorous grower and very productive. The fruit is black and of medium size.

Poplar, Carolina, 35c—Rapid grower, beautiful single tree for lawn. Makes a good screen, windbreak or back ground for garden. Special price \$20 per hundred.

Poplar, Lombardy, 60c—Remarkable for its erect, rapid growth, attaining a height of 100 to 150 feet. Useful in landscape gardening, breaking the monotonous outline of other trees.

Walnut, Black, 60c—Large size and rapid grower. Nuts excellent for eating. The wood is valuable being much used in the manufacture of furniture.



The Graceful Cut-leaf Birch

Evergreens

Dozen Rates: 12 sold for the price of 10

Arbor Vitae, American, 60c—Excellent for screens and hedges. Has a soft light green foliage. Should be included in all groups of evergreen planting. Can be kept any height.

Fir, Balsam (Balm of Gilead), 75c—Hardy, grows rapidly and very erect. Has dark green needles, pleasing fragrance, purple cones. Does well on coast or inland.

Pine, Austrian, \$1.00—Very hardy. Its long, stiff leaves are a constant green. Does well in any soil.

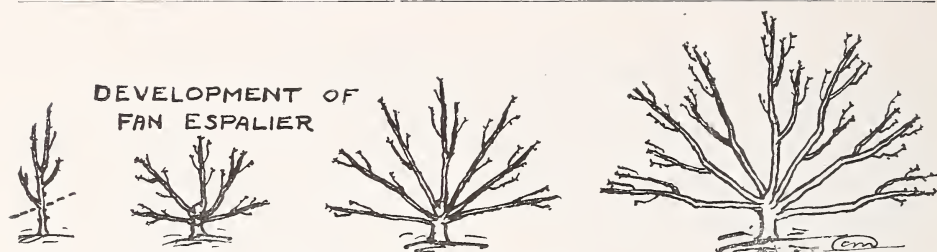
Pine, Scotch, \$1.25—Very good for windbreaks. Hardy and rapid grower. Silvery green foliage.

Spruce, Colorado Blue, \$2.50—Foliage a deep blue. One of the hardiest and most beautiful of the Spruces. One of the Rocky Mountain specimens.

Spruce, Norway, \$1.00—Best known of the Spruces, commonly called the Christmas tree. Grows to height of 50 feet. One of best evergreen hedge plants.



Colorado Blue Spruce



TRAINING TO FAN ESPALIER

Trim the tree we send you about as indicated by the dotted line in Fig. 1. Figure 2 shows about as it should appear the fall of the same season, and Figs. 3 and 4 as it should appear at the close of the two following seasons. These two seasons the tree may show some fruit.

Management of Dwarf Fruit Trees

SUMMER AND WINTER PRUNING

In Europe the word "standard" is used in contra distinction to the term "espalier," standards being self-supporting fruit trees while the espaliers require artificial support. In this country the word "standard" is used in contra distinction to the term "dwarf," so that we divide dwarfs into two classes—self supporting and espalier forms. "Espalier" means a "trellis," hence trees trained on a trellis came to be called "espaliers." The term espalier does not refer to any particular method or form of training. The pyramid, bush and globe forms of dwarfed fruit trees are all self-supporting. The fan, palmette, gridiron, many-armed horizontal espalier and the numerous cordons are all espalier forms and are grown on a trellis, fence, wire support or a wall. The gardener should understand that there is no essential method of training for any of the fruits. He may take any fruit tree and with proper care train it to whatever form he may desire.

Du Breuil gives the following reasons for training dwarfs to special form:

1. It enables us to impart to trees a form suited to the place they are intended to occupy.
2. Each of the principal branches is furnished with fruit branches throughout its full extent.
3. It renders fruitification more equal; for in removing every year the superabundant buds and branches, we contribute to the formation of new fruit buds for the next year.
4. It conduces to the production of large fruit and of finer quality.

Fruit trees may be induced to dwarf growth in three ways:

- (1) budding on a slow growing root;
- (2) restricting the growth of the top;
- (3) restricting the growth of the roots.

The growth of the top is restricted by summer pruning or pinching back during the growing season, followed when necessary by severe heading back of the leaders early the next

spring. Restricting the root growth is considered in this country rather an excessive measure practiced occasionally on the rankest growing varieties. When necessary it is accomplished by root pruning or by growing the tree with its roots within the confines of a pot, box or tub. In Europe pot grown dwarfs for the orchard house are for sale by many nurserymen, but they are little used in the United States.

Our dwarfs are already budded on slow growing roots. In addition to this, however, the planter's proper management of the tops of the trees has such a great additional influence in perfecting the dwarf habit of growth and in securing early fruition, that our particular attention is here given to the restriction of the growth of the head of the tree and the method of controlling its shape.

A leader is one of the main branches of the tree, whether bush, pyramid, cordon or any of the espalier forms. This leader originates at the butt or main trunk of the tree and ends in what we may call the leader terminal, which is young wood of this year's growth. This terminal growth of the leader must be allowed to grow at will during the summer without pinching back. This is left unchecked to secure vigorous circulation of sap throughout the tree, and is necessary for its healthy development. The only exception to this rule for allowing the leader terminal to grow unchecked, will occur when the leader makes such rapid and exuberant growth as to absorb all the growing energy and prevent its side shoots from growing strongly enough, or even to prevent these sides shoot from starting to grow at all. When this happens, it is advisable, late in June to top-off these leaders. That is, pinch off a few inches of the young terminal growth. This operation should control the growth of the leader and start its side shoots into proper development.

Leaves and side shoots grow out along the length of every leader. These side shoots are to be pinched back during the growing



season to form fruit buds for next year. If, as might be desired on a dwarf bush, one of the main branches is allowed to divide in two, each of these branches so formed becomes a leader and is treated as such in every respect.

Summer pruning and winter pruning are two distinct sorts. We summer prune or pinch back in the growing season. In New York State we consider the growing season as lasting from the middle of May until August. With us the winter or dormant pruning is usually done in February or early in March; but in any region this should be done before the buds start to grow. Summer pruning restrains growth, and causes production of fruit, while, on the contrary, winter pruning causes increase of growth and production of wood. In general, the side shoots are subject to summer pruning and the leaders are subject to winter pruning. Summer pruning consists chiefly of pinching back young side shoots on the leaders. When a side shoot has grown about six leaves pinch off the end so that but three leaves remain. Thereafter during the summer as often as these shoots send out three additional leaves, pinch off two of them. This must be done every summer. The pinched back side roots are thus induced to become fruit spurs, and to form fruit buds which should produce fruit the following year. If fruit spurs form too thickly along the leaders remove as many as necessary at the time of the dormant pruning in March. When you come to winter prune the young trees after their first season's growth, select all the leaders and cut away from one-half to two-thirds of their length. Repeat this every winter or in March, till you have the leaders as long or high as you want them; then in your winter pruning, cut back the new growth on these same leaders, to within a few inches, or to two or three buds, of the point, to which it was cut back the spring before. This process is absolutely

necessary to keep the top of the tree down and headed in to the proper size.

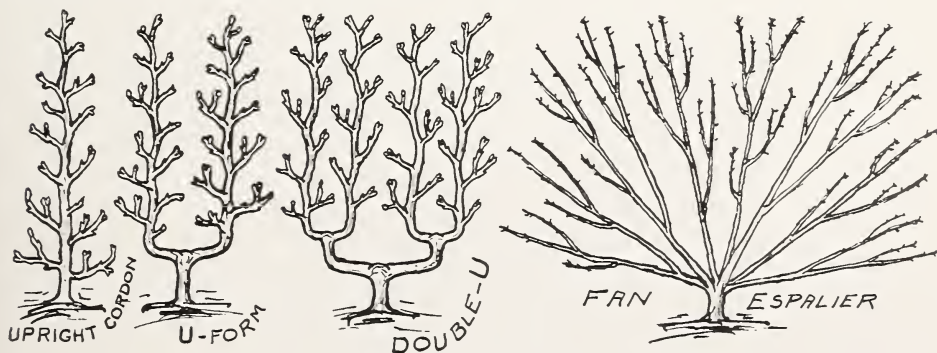
Remember These General Rules:

First—When the tree has been planted in the fall, except in the semi-tropics of the South, no pruning is to take place till the following spring, before the buds start.

Second—In all pruning with the knife, make a clean, somewhat slanting cut just above a good thrifty bud; if wood is left on above the bud, there being no growth above it to draw the sap, it dies, and decays down in the heart of the live wood below the bud and may cause trouble. Therefore the knife cut should be made close to the bud.

Third—In all these directions the term "leader" is applied to each branch of the tree, no matter what the form, which is a part of the framework of the tree, whether it be the one branch of a simple cordon, or one of a "U," or an arm of an espalier, or one of the frame work of your bush or pyramid.

Fourth—In all forms where a certain height is desired, like all forms of the upright cordons bush and pyramids, when you trim back the leaders in March, leave as much of the leader on as you wish in order to give the tree the additional height you want it to attain this year; after the tree has nearly as much height as you wish it to have, thereafter cut the leaders right down to within an inch or so of last spring's trimming, thus keeping the tree just as you want it in height. If the tree is strong you may leave more wood; if it seems a little weak, trim a little closer to induce wood growth. Bear always in mind the statement—"Summer pruning restrains growth and causes production of fruit, while on the contrary winter pruning causes increase of growth and production of wood."



PLANTING DISTANCES

Apples, Standard.....	30 to 40 ft.	Cherries, Sour, Dwarf.....	8 to 10 ft.
Apples, Dwarf.....	8 to 10 ft.	Plums, Standard.....	15 to 20 ft.
Apples, Dwarfed on Paradise.....	6 to 8 ft.	Plums, Dwarf.....	10 to 12 ft.
Pears, Standard.....	18 to 20 ft.	Quinces.....	10 to 12 ft.
Pears, Dwarf.....	10 ft.	Grapes.....	8 to 10 ft.
Peaches, Standard.....	16 to 18 ft.	Currants.....	3 by 5 ft.
Peaches, Dwarf.....	8 to 10 ft.	Gooseberries.....	3 by 5 ft.
Apricots, Standard.....	16 to 18 ft.	Raspberries, Red.....	3 by 6 ft.
Apricots, Dwarf.....	8 to 10 ft.	Raspberries, Black.....	3 by 6 ft.
Cherries, Sweet, Standard.....	18 to 20 ft.	Blackberries.....	5 by 7 ft.
Cherries, Sweet, Dwarf.....	10 to 12 ft.	Asparagus, in beds.....	1 by 1½ ft.
Cherries, Sour, Standard.....	14 to 18 ft.	Asparagus, in fields.....	1 by 3 ft.

FALL PLANTING

In ordering from this catalogue for fall planting, omit roses, peach trees, raspberries and blackberries. Evergreens are also best planted in the spring as we can not get them to you as early as should be when they are to be fall planted. Practically all the other trees we offer may safely be transplanted in the fall, except in the very coldest regions.

It has been our endeavor to make this catalogue as much a hand book and guide to the home planter, as it is a price list of the trees and plants we offer in it's pages. We mail it with the hope that it may prove of some real value to those who already have home fruit plantations, as well as to all who are about to make their first plantings. If advice is desired in the selection of varieties, don't fail to let us help you. We are always delighted to answer questions to the best of our ability.

*Law prohibits entry of these plants in states opposite which they are starred.	5-leaf pines	Gooseberries	Currants	Peach trees
California.....	*	*	*	*
Connecticut.....	*	*	*	*
Delaware.....	*	*	*	*
Delaware.....	*	*	*	*
Georgia.....	*	*	*	*
Idaho.....	*	*	*	*
Illinois.....	*	*	*	*
Indiana.....	*	*	*	*
Kansas.....	*	*	*	*
Maine.....	*	*	*	*
Maryland.....	*	*	*	*
Michigan.....	*	*	*	*
Minnesota.....	*	*	*	*
Montana.....	*	*	*	*
N. Hampshire.....	*	*	*	*
New Jersey.....	*	*	*	*
Oregon.....	*	*	*	*
Pennsylvania.....	*	*	*	*
South Dakota.....	*	*	*	*
Tennessee.....	*	*	*	*
W. Virginia.....	*	*	*	*
Wisconsin.....	*	*	*	*

OUR GUARANTY—REPLACEMENTS—We have never undertaken to replace trees or plants which fail to live, and only in exceptional cases have we broken this rule. By consistent effort we have reduced our customers losses to a minimum, and this year we will replace at half price such trees or plants as do not live, provided you report to us before August 1st, after the fall or spring you receive the trees for planting.

OUR GUARANTY—SUBSTITUTIONS—We take a different position with respect to orders evidently intended for commercial orchard planting, and those evidently intended for home use only.

Orders for Commercial Orchard—In respect to such orders we guarantee our customers against wilful or intentional change of labels, and will exercise the greatest care to have every variety exactly what it purports to be. In case of any error we will replace with other stock or refund the purchase price as preferred. On such orders if you desire substitutions made in case we are out of a variety ordered, please state this wish when you place your order, otherwise we shall omit such varieties and refund the money for them.

Orders for Home Use—On these orders, showing from the number of each variety ordered that they cannot be intended for commercial orchard, we shall, if out of a variety ordered, send some other variety in its place. **CORRECTLY LABELLED.** We shall send a variety as nearly like the one ordered as we have, and no low priced variety will be sent for a higher priced one without refunding the difference in cost. This will be our general rule; now if you desire no changes whatever in your order, state the fact and no changes will be made, and the money will be refunded for any varieties that we cannot furnish.

If your order is for fruit trees, we shall construe an order for ten or more trees of a variety as being intended for commercial planting, such as 10 McIntosh, but not 10 apple trees made up of several varieties. In small fruits, however, there may be room for doubt, and therefore we would much prefer that you indicate your wishes about each variety when ordering.

CASH WITH ORDER—We shall decline to fill orders not paid for before shipment. That we ask for cash is no reflection on the credit of our customers, but is an absolute necessity to success in a mail order business where thousands of orders are handled, the average amount of which is a very few dollars each. Neither do we ship C. O. D. This is both more expensive for the buyer, and makes more trouble in shipping when our whole force is very busy.

MANNER OF REMITTING—Any way most convenient to you—postal or express order, or your own personal check. Do not send cash in a letter without registering.

PRICES—Are f. o. b. Geneva, N. Y., and subject to change without notice.